

Name: _____ TP: _____

Directions: CIRCLE the two problems that you have *not* worked on in class this semester. This will show your teacher if you are aware of which problems you should confidently solve. You must attempt the circled problems as well, and they will count as extra credit on EVERY homework assignment! You must show all work on every problem, or you will not receive full credit (and will land yourself in LaSalle).

_____/8

_____/2

1)

If $x = -3$, what is the value of $\frac{x^2 - 1}{x + 1}$?

F. -4

G. -2

H. 2

J. $3\frac{2}{3}$

K. 5

2)

Mr. Jones earns a total of \$320 each week at his job in Shaba's Supermarket. If 18% of his pay is withheld for taxes, insurance, and other deductions, what is his take-home pay each week?

A. \$ 57.60

B. \$262.40

C. \$300.50

D. \$320.00

E. \$338.00

WITHHELD... add or sub?

3)

If $2(x - 5) = -11$, then $x = ?$

A. $-\frac{21}{2}$

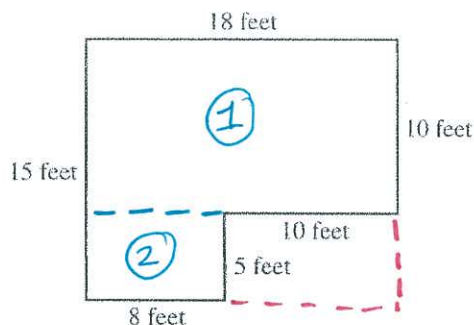
B. -8

C. $-\frac{11}{2}$

D. -3

E. $-\frac{1}{2}$

4)



a) What is the perimeter of the figure?

Add

b) What is the area of the figure?

Multiply!

① Find area of rectangle 1: } COMBINE!

② Find area of rectangle 2: }

① Distributive Property!

② SOLVE for X

• Opposite of -10 → _____

• Opposite of 2X → _____

Bringin' Zesty Back. Yeah!

5)

4. If $x = -4$, what is the value of $3x^2 - 15x$?

- A. -108
- B. -12
- C. 12
- D. 29
- E. 108

*Put () around x when you substitute in your calculator!

6)

5. You tossed a fair coin 10 times, recording H when the head side landed up and T when the tail side landed up. You recorded: T H H H H T H H H H. What is the probability that the head side will land up on your next toss?

F. 0

G. $\left(\frac{1}{2}\right)^{11}$ H. $\left(\frac{1}{2}\right)^9$ J. $\frac{1}{2}$

K. 1

Favored outcome
Total outcomes
↓
(H or T)
↓
2 total!

7)

3. $-(-3a^3)^2$ is equivalent to:

F. $-9a^6$ G. $-3a^5$ H. $3a^5$ J. $6a^6$ K. $9a^6$

*When you have the power rule... MULTIPLY!

*BRING down the negative on the outside.

8) Simplify: $\frac{3h^6j^3}{12h^{-2}j}$

$$\frac{3 \cdot h^6 \cdot j^3}{12 \cdot h^{-2} j}$$

① Simplify #s

② Move neg. exponent to top

③ $\frac{jji}{j}$ what happens to j's on top & bottom?

9)

6. The regular price of a calculator is \$49.95 before taxes. It goes on sale at 20% below the regular price. Before taxes are added, what is the sale price of the calculator?

- F. \$ 9.99
- G. \$24.98
- H. \$29.95
- J. \$39.96
- K. \$44.95

49.95

① Δ % to decimal

② MULTIPLY!

③ "on sale"... add or subtract?

10) Solve:

$$8 = \sqrt{x - 3} + 3$$

① ALWAYS get radical alone:
• opposite of +3 is... —② opposite of $\sqrt{\quad}$ is... —
• square both sides!

Bringin' Zesty Back. Yeah!

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1)

If $f(x) = 3x^2 + 5x - 5$, then $f(-2) = ?$

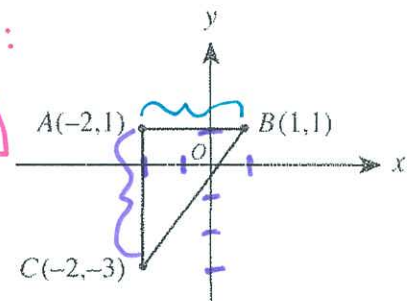
- F. 21
- G. 17
- H. 3
- J. -3
- K. -27

$f(x)$; this means $x = -2$!

2)

In the standard (x,y) coordinate plane, if a triangle has vertices at $A(-2,1)$, $B(1,1)$, and $C(-2,-3)$, what is its area in square coordinate units?

Area of \triangle :
 $\frac{1}{2} \cdot H \cdot B$



- A. 5
- B. 6
- C. $\frac{15}{2}$
- D. 10
- E. 12

① Count the height by counting the tick marks going up & down.
 ② Count the base by counting the tick marks going across

3)

What is the slope of a line that is parallel to $x + 2y = 6$?

- A. -2
- B. $-\frac{1}{2}$
- C. $\frac{1}{2}$
- D. 3
- E. 6

*ALWAYS solve for y !!
 $x + 2y = 6$

① opposite of $+x$... $-$
 ② opposite of $2y$... $-$
 ③ Slope is # in front of x !

4) Simplify: $(-10j^3h)^2$

$(-10 \cdot j^3 \cdot h)^2$

*Power rule means MULTIPLY!

Bringin' Zesty Back. Yeah!

5) Solve: _____

$$5 + \sqrt{5 - b} = b$$

*~~look~~ Get radical alone!
 • opposite of +5... —
 * opposite of $\sqrt{\quad}$ is... —

6)

\$85.50

The regular price of a calculator is ~~\$49.95~~ before taxes. It goes on sale at 20% below the regular price. Before taxes are added, what is the sale price of the calculator?

- F. \$ 9.99
- G. \$24.98
- H. \$29.95
- J. \$39.96
- K. \$44.95

85.50

- ① Δ % to decimal
- ② MULTIPLY
- ③ "on sale"... + or - ?

7)

4. If $f(x) = (3x + 7)^2$, then $f(1) = ?$

- F. 10
- G. 16
- H. 58
- J. 79
- K. 100

$f(x)$ $x=1$

* Hint: SQUARE @ the END

8)

What is the product of $(2x)^3$ and $3y^2$?

- A. $6x^3y^2$
- B. $24x^3y^2$
- C. $24x^3y^5$
- D. $54x^3y^2$
- E. $72x^3y^2$

$(2 \cdot x)^3 \cdot 3y^2$

- ① multiply exponent 3 to 2 & x
- ② multiply coefficients

9) What is the slope of a line that passes through (2, 4) and (0, 10)?

YOU write down the formula

10) Solve:

$$\sqrt{v - 4} + 2 = 2$$

* work @ #5

Bringin' Zesty Back. Yeah!